

REMARKS

Claims 1-21 were pending and presented for examination in this application. In an Office Action dated September 20, 2006, claims 1-21 were rejected. The drawings were also objected to. Applicants thank Examiner for examination of the drawings and the claims pending in this application and address Examiner's comments below.

Applicants are adding new claims 22-26 with this Amendment and Response. Applicants are amending claims 1-7, 9, 14 and 16-21 in this Amendment and Response. Applicants are also amending the specification. These changes are believed not to introduce new matter, and their entry is respectfully requested.

In view of the Amendments herein and the Remarks that follow, Applicants respectfully request that Examiner reconsider all outstanding objections and rejections, and withdraw them.

Response to Drawing Objection

Examiner objected to the drawings as failing to comply with 37 CFR 1.84 (p) (5) because they include reference characters not mentioned in the description. As suggested in the Office Action, the specification is amended herein to add the reference characters in the description. Thus, the objections to the drawings are overcome.

Response to Rejection Under 35 USC § 112

Examiner rejected claim 17 under 35 USC § 112 as allegedly lacking antecedent basis for the limitation of “the input signal”. Applicants respectfully disagree. Claim 17 is dependent on claim 16, which is dependent on claim 1. Claim 1 as amended recites “identifying an input signal indicating an interest in a first piece of information.” Therefore, the limitation of “the input signal” in claim 17 has proper antecedent basis in claim 1. Examiner noted that “it is not clear as to whether the claimed input signal is a second or first input signal.” Applicants respectfully submit that claim 1 only recites one input signal and there is no ambiguity for the limitation of “the input signal” in claim 17. Therefore, this rejection is respectfully traversed.

Response to Rejection Under 35 USC 101

Examiner rejected claims 1-21 under 35 USC § 101 as allegedly directed towards non-statutory subject matter. Applicants respectfully disagree.

Examiner noted that “Claims 1-17 are rejected for failing to provide a result that is useful, concrete and tangible. In detail, the result of these claims is merely a determination. The lack of a tangible result leaves the determination to be realized.”

Applicants respectfully submit that the claimed invention recited in claim 1 as amended produces a “useful, concrete and tangible” result – “ranking the collection of information based on the score.” First, the result is useful as it provides users with more accurate ranking of a collection of information based on an input signal indicating an interest in a piece of information in the collection, therefore enabling users to make more informed

decisions related to the collection. The result is tangible as the collection of information are ranked based on a score determined on the input signal, therefore produced a real-world result. See MPEP 2106 (IV) (“the tangible requirement does require that ... the process claim must set forth a practical application of [a 35 U.S.C. 101] judicial exception to produce a real-world result.”). The result is concrete because it provides a specific sequence of information in the collection. Therefore, Applicants’ invention defined in claim 1 provides a useful, concrete and tangible result and is a patentable subject matter under 35 U.S.C. §101. See MPEP §2106.

Claims 2-17 are dependent on claim 1, all arguments advanced above with respect to claim 1 are hereby incorporated so as to apply to claims 2-17. Therefore, this rejection is overcome. If the Examiner maintains this rejection, Applicants respectfully request that the Examiner provide a more detailed explanation of why the claimed invention fails to provide a result that is useful, concrete and tangible.

Examiner noted that “Claims 18-21 are rejected for being unclear on how the program code is encoded on the computer-readable medium (i.e. if encoding is to be interpreted the same as storing the program code).”

Applicants respectfully disagree. Section 2106 (IV) (B) (1) (a) of MPEP recites that “a claimed computer-readable medium *encoded* with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, and is thus statutory.” (Emphasis added.) Therefore, reciting that the program code is encoded on the computer-readable medium is sufficient to define “structural and

functional interrelationships between the computer program and the rest of the computer.”

See MPEP 2106 (IV) (B) (1) (a). Nevertheless, to expedite prosecution, Applicants have amended claim 18 to more explicitly recite that the computer program instructions are tangibly embodied in a computer-readable medium. Claims 19-21 are dependent on claim 18, all arguments advanced above with respect to claim 18 are hereby incorporated so as to apply to claims 19-21. Therefore, this rejection is overcome.

Response to Rejection Under 35 USC 102(e) in View of Barrett

Examiner rejected claims 1-5, 9-12, 16-18 and 21 under 35 USC § 102(e) as allegedly being anticipated by U.S. Patent Application 2003/0135490 by Barrett et al. (“Barrett”).

Claim 1 has been amended to now recite:

A computer-implemented method for ranking a collection of information associated with a plurality of search queries, comprising:

identifying an input signal indicating an interest in a first piece of information in the collection;

determining a search query associated with the first piece of information;

determining a search query associated with a second piece of information from the collection;

determining whether the search query associated with the first piece of information and the search query associated with the second piece of information are the same; and

if the search query associated with the first piece of information and the search query associated with the second piece of information are the same,

determining a score for the second piece of information based at least in part on the input signal, and

ranking at least some of the collection of information based on the score. (emphasis added)

Support for the proposed claim amendments is found in the specification as filed at, for example, in paragraphs [00100-00103], and Figure 7. As amended, claim 1 recites determining whether a search query associated with a first piece of information and a search query associated with a second piece of information are the same. If the search queries are the same, claim 1 further recites determining a score for the second piece of information based at least in part on an input signal indicating an interest in the first piece of information and ranking at least some of a collection of information based on the score. If a user is interested in one piece of information, he tends to be also interested in other information associated with the same search query, because they tend to share common characteristics that interest the user. Therefore, the input signal also indicates an interest in other information associated with the same search query as the first piece of information.

For example, assume two search queries are generated based on a user's inquiry, one for documents stored locally ("the local search query"), and the other for documents accessible through the Internet ("the global search query"). The results of both search queries are added to a collection. If a user expresses interest in a piece of information resulting from the local search query, other information resulting from the local search query is more likely to be of interest than information resulting from the global search query. Therefore, by determining a score for the second piece of information based on an input signal of the first piece of information, the claimed invention ranks the information associated with different search queries more accurately and enables users to make more informed decisions. Likewise, independent claim 18 recites the claimed features cited above.

Barrett, among other differences, does not disclose the claimed features emphasized above. Barrett, in contrast, discloses a method to determine scores for information in a search result based on user's interactions with information in the same search result, and use the score to rank *subsequent* search results. See Barrett, e.g., page 1, paragraphs [0009] and [0012] (“In Step 20, the present invention will rank *future search results* based on enhanced popularity scoring generated from some or all of the data collected in Steps 10, 12, 14 and 16.” Emphasis added.). Therefore, Barrett determines the score based on user selection and use of information in an earlier query, and uses the score to rank subsequent search results. Thus, Barrett does not disclose “ranking a collection of information associated with a plurality of search queries ... if the search query associated with the first piece of information and the search query associated with the second piece of information are the same, determining a score for the second piece of information based at least in part on the input signal, and ranking at least some of the collection of information based on the score.” In fact, in Barrett there is no hint or suggestion of ranking information associated with multiple search queries. Also, because Barrett uses the determined score to rank “future search results,” such ranks require one or more precursor search queries to determine the score, which is not required in the claimed invention. In contrast, the claimed invention determines a score for one piece of information based on an input signal of another piece of information associated with the same search query, and *rank at least some of a collection of information including both pieces of information* based on the score. Thus, Barrett fails to disclose the claimed invention.

In view of the claim amendments and remarks above, Applicants respectfully submit that for at least these reasons the claimed invention recited in claim 1 is patentably distinguishable over the cited reference. Similarly, Applicants submit that claim 18, as amended, also is distinguishable over Barrett for the same reasons. Therefore, Applicants respectfully request that Examiner reconsider the rejection, and withdraw it.

As to the dependent claims, because claims 2-5, 9-12, 16 and 17 are dependent on claim 1, and claim 21 is dependent on claim 18, all arguments advanced above with respect to claim 1 are hereby incorporated so as to apply to claims 2-5, 9-12, 16, 17 and 21. Therefore, Applicants respectfully request that Examiner reconsider and withdraw the rejection to these claims.

Response to Rejection Under 35 USC 103(a) in View of Barrett and Claypool

Examiner rejected claims 6-8, 13-15, 19 and 20 under 35 USC § 103(a) as allegedly being unpatentable over Barrett in view of “Inferring User Interest” by Mark Claypool, et al. in IEEE Internet Computing 5(6): 1-17 (2001) (“Claypool”).

Because claims 6-8 and 13-15 are dependent on claim 1, and claims 19 and 20 are dependent on claim 18, the arguments set forth with respect to claim 1 are applicable for claims 6-8, 13-15, 19 and 20. As set forth above with reference to claim 1, Barrett does not disclose determining whether a search query associated with a first piece of information and a search query associated with a second piece of information are the same and, if the queries are the same, determining a score for the second piece of information based at least in part on

an input signal indicating an interest in the first piece of information and ranking at least some of a collection of information based on the score.

Further, Claypool also fails to disclose the claimed elements cited above. In contrast to the claimed invention, Claypool recites a system and method to determine an implicit rating of a piece of information based on users' interaction with that piece of information. See Claypool, e.g., Abstract and pages 6-8. Specifically, Claypool discloses an approach to determine users' implicit interest in a piece of information (webpage) by monitoring the users' actions (mouse activities, scrollbar activities, and keyboard activities) while viewing the piece of information. See Claypool, e.g., Section 4. This disclosure in Claypool is not what Applicants claim. For example, similar to Barrett, Claypool does not hint or suggest the claimed method to determine a second piece of information associated with the same search query as a first piece of information, determine a score for the second piece of information based on an input signal of the first piece of information, and rank a collection of information based on the score. Therefore, Claypool fails to disclose the claimed features cited above.

Likewise, the combination of Barrett and Claypool also fails to disclose or suggest the claimed features cited above. As discussed above, the above claimed feature is not disclosed in either reference. However, even if the two references arguably could be combined, the combination would fail to show a method to determine a second piece of information associated with the same search query as a first piece of information, determine a score for the second piece of information based on an input signal of the first piece of information, and rank a collection of information based on the score.

Thus, alone or in combination, Barrett and Claypool do not disclose the claimed invention as recited in claim 1 as amended, as presented herein. As set forth above, the arguments set forth with respect to claim 1 are applicable for claims 6-8, 13-15, 19 and 20. Therefore, based on the Amendments and Remarks herein, Applicants respectfully submit that for at least these reasons claims 6-8, 13-15, 19 and 20 also are patentably distinguishable over the cited references, both alone and in combination. Therefore, Applicants respectfully request that Examiner reconsider and withdraw the rejection to these claims.

Conclusion

Applicants have added new claims 22-26 for which Applicants request consideration and examination. Applicants respectfully submit that these are supported by the specification and are commensurate within the scope of protection to which Applicants believe they are entitled.

In sum, Applicants respectfully submit that claims 1-21, as presented herein, are patentably distinguishable over the cited references (including references cited, but not applied). Therefore, Applicants request reconsideration of the basis for the rejections to these claims and request allowance of them.

In addition, Applicants respectfully invite Examiner to contact Applicants' representative at the number provided below if Examiner believes it will help expedite furtherance of this application.

Respectfully Submitted,
Stephen R. Lawrence, et al.

Date: January 22, 2007

By: /Sabra-Anne R. Truesdale/

Sabra-Anne R. Truesdale, Reg. No.: 55,687
Fenwick & West LLP
Silicon Valley Center
801 California Street
Mountain View, CA 94041
Tel.: (650) 335-7187
Fax: (650) 938-5200